

Dairy Cow Synchronization Protocols - 2011

Timed AI after detection of estrus

For herds with efficient and accurate estrus-detection systems in place.



Definitions and comments:

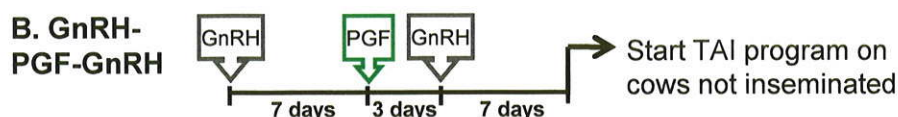
EDAI = estrous detection and AI after detection of estrus.

Start and stop dates for EDAI depend on the voluntary waiting period (VWP) and the reproductive goals of the individual herd.

Presynch methods used before Ovsynch

Used with Ovsynch programs (listed below) to increase pregnancies per AI (P/AI).

Programs can be used with or without estrous detection and AI (EDAI).



Definitions and comments:

PGF = prostaglandin F_{2α}. Trade names for suitable products include: Lutalyse®, Estrumate®, Prostamate®, In-Synch®, and estroPLAN®.

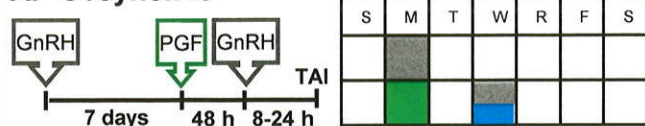
GnRH = gonadotropin-releasing hormone. Trade names for suitable products include: Cystorelin®, Factrel®, Fertagyl®, and OvaCyst®.

Intensity of red color within EDAI denotes periods to expect most cows in estrus. Most cows come into estrus 2 to 7 d after PGF.

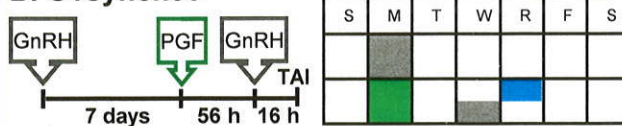
Ovsynch methods used for TAI

Can be used alone or with presynch methods (see above). Programs can be used with or without EDAI.

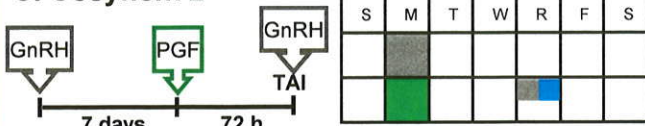
A. Ovsynch48



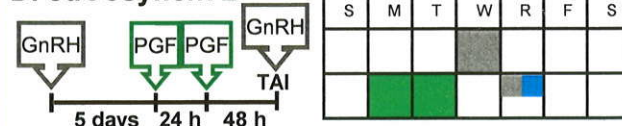
B. Ovsynch56



C. Cosynch72



D. 5dCosynch72

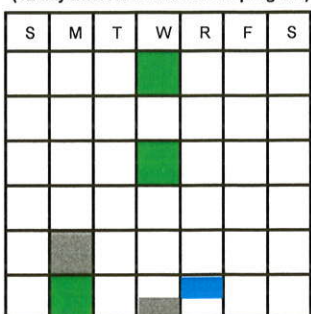


A CIDR can be used with any of these programs (CIDR_Ovsynch). The CIDR is inserted at first GnRH and removed at PGF. An example would be CIDR_Ovsynch56.

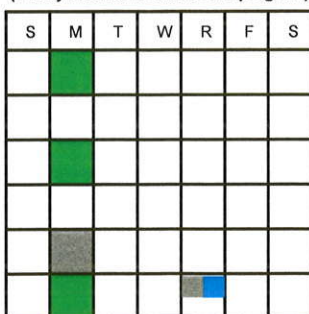
Presynch-Ovsynch Calendars

Calendars are examples of presynch-ovsynchron combinations that are used for insemination. Any presynch program can be combined with any Ovsynch program. Any cow observed in estrus after the VWP can be inseminated. Cows will often show estrus 2 to 7 d after PGF.

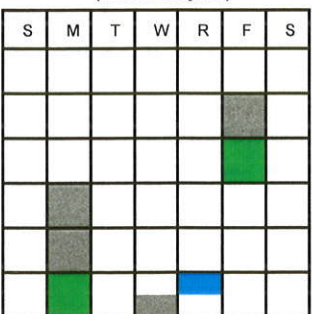
2xPGF/Ovsynch56 (12 day interval to start of TAI program)



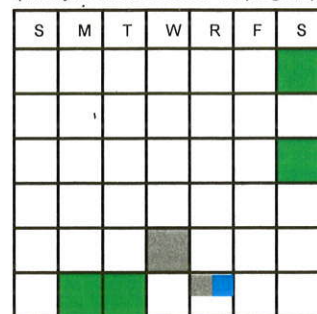
2xPGF/Cosynch72 (14 day interval to start of TAI program)



GnRH-PGF-GnRH/Ovsynch56 (Double Ovsynch)



2xPGF/5dCosynch72 (14 day interval to start of TAI program)



The synchronization efficiency and fertility may differ among the listed programs. Specific research data should be evaluated to determine the program that is optimal for use on a particular dairy.

This protocol sheet was assembled by members of the Dairy Cattle Reproduction Council (DCRC). Programs are intended to promote sustainable food production by the dairy industry through sound reproductive management practices.
M.C. Lucy (MO), R.C. Chebel (MN), P.M. Fricke (WI), J.C. Dalton (ID), and S.E. Pook (MO), January 2011.